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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,977	11/24/2003	David B. MacLean	PC10842B	5199

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PFIZER INC.
PATENT DEPARTMENT, MS8260-1611
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EXAMINER	
SPIVACK, PHYLLIS G	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/720,977	MACLEAN ET AL.	
	Examiner	Art Unit	
	Phyllis G. Spivack	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Applicants' Preliminary Amendment filed November 24, 2003, which sets forth cross references to related applications, is acknowledged.

Claims 1-16 are presented.

A response to a request for an election of species filed July 1, 2004 is further acknowledged. Applicants have elected the species 2-amino-N-(2-(3a- (R)-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo-[4,3-c]pyridin-5-yl)-1- (R)-benzyloxymethyl-2-oxo-ethyl)-isobutyramide.

The search has been extended beyond Applicants' election to include the compounds of claims 11-14.

An Information Disclosure Statement filed May 14, 2004 is further acknowledged and has been reviewed.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12, 15-21 and 26-38 of copending Application No. 09/912857. Although the conflicting claims are not

identical, they are not patentably distinct from each other because of overlapping subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-8, 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or practice the invention. The claims are directed to the treatment of an age-related decline in physical performance in an at-risk patient comprising administering any growth hormone secretagogue or a growth hormone secretagogue of instant Formula I. The specification provides support for an increase in exercise capacity following the administration of 2-amino-N-(2-(3a- (R)-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo-[4,3-c]pyridin-5-yl)-1- (R)-benzyloxymethyl-2-oxo-ethyl)-isobutyramide.

Attention is directed to In re Wands, 8 USPQ2d 1400 where the court set forth factors to consider when assessing whether or not a disclosure would require undue experimentation. These factors are:

1) the quantity of experimentation necessary

2) the amount of direction or guidance provided

3) the presence or absence of working examples

4) the nature of the invention

5) the state of the art

6) the relative skill of those in the art

7) the predictability of the art and

8) the breadth of the claims.

The instant specification fails to provide guidance that would allow the skilled artisan background sufficient to practice the instant invention without resorting to undue experimentation in view of further discussion below.

The nature of the invention, state of the prior art, relative skill of those in the art and the predictability of the art

The claimed invention relates to treatment of any age-related decline in physical performance in an at-risk patient who exhibits objective evidence of decline in physical performance.

The relative skill of those in the art is generally that of a Ph.D., V.M.D. or M.D. in the field of gerontology.

Each particular age-related decline in physical performance has its own specific characteristics and etiology. The unpredictability observed with single agent therapy is compounded when a combination of agents is employed, as required by claims 15 and 16. The broad recitation "treatment of an age-related decline in physical performance in an at-risk patient" is inclusive of many pathologies that presently have no established successful therapies.

It is clear the art to which the present invention relates is highly unpredictable and unreliable with respect to conclusions drawn from laboratory data extrapolated to clinical efficacy.

The breadth of the claims

The claims are very broad and inclusive of any physical performance decline.

The amount of direction or guidance provided and the presence or absence of working examples

The working example is limited to the administration of 2-amino-N-(2-(3a- (R)-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo-[4,3-c]pyridin-5-yl)-1- (R)-benzyloxymethyl-2-oxo-ethyl)-isobutyramide to show an increase in exercise capacity. Although the administration of the growth hormone secretagogues recited in claim 15 are known in the prior art to be used in combination therapy, there is no support for the administration of compounds of instant Formula I with of arginine, insulin or L-dopa together with propranolol.

The quantity of experimentation necessary

Applicants have failed to provide guidance as to which particular growth hormone secretagogue, optionally in combination with an agent recited among those of claims 15 or 16, would be preferred for treatment of the many aspects of age-related physical performance decline. The skilled artisan would expect the interaction of a particular combination of drugs in the treatment of a particular condition to be very specific and highly unpredictable absent a clear understanding of the structural and biochemical basis for each agent. The instant specification sets forth no such understanding or any criteria for extrapolating beyond the administration of 2-amino-N-(2-(3a- (R)-benzyl-2-methyl-3-oxo-2,3,3a,4,6,7-hexahydro-pyrazolo-[4,3-c]pyridin-5-yl)-1- (R)-benzyloxymethyl-2-oxo-ethyl)-isobutyramide to increase exercise capacity. No direction

is provided to treat any other condition of age-related physical performance decline. Absent reasonable *a priori* expectations of success for using a particular growth hormone secretagogue, one skilled in the gerontology art would have to test extensively many growth hormone secretagogues to discover which particular condition of age-related physical performance decline responds to that particular agent. Since each prospective embodiment, as well as future embodiments as the art progresses, would have to be empirically tested, undue experimentation would be required to practice the invention as it is claimed in its current scope. The specification provides inadequate guidance to do otherwise.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Ankersen et al., Drug Discovery Today. Ankersen teaches the administration of selected growth hormone secretagogues to treat age-related conditions. See compound CP424391 in Figure 4 on page 500 and Table 1 on page 501. In particular, growth hormone secretagogues are disclosed to offer a great potential to reverse the decline of growth hormone in the elderly. Subsequent to the oral administration of MK0677, an increase in muscle strength was noted. See the bottom of the first column on page 503.

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Carpino et al., WO 97/24369.

Carpino teaches the administration of the species of instant claims 9-12 as growth hormone secretagogues for the treatment of frailty associated with aging, osteoporosis, improving muscle strength and mobility, all factors associated with age-related decline in physical performance. The elected species is shown on page 84. Further, as required by claim 15, the additional administration of GHRP-6, hexarelin, GHRP-1, GRF, IGF-1 and IGF-2 is disclosed.

No claim is allowed.

Any inquiry concerning this communication should be directed to Phyllis G. Spivack at telephone number 571-272-0585.

Phyllis Spivack

Phyllis G. Spivack
Primary Examiner
Art Unit 1614

September 18, 2004